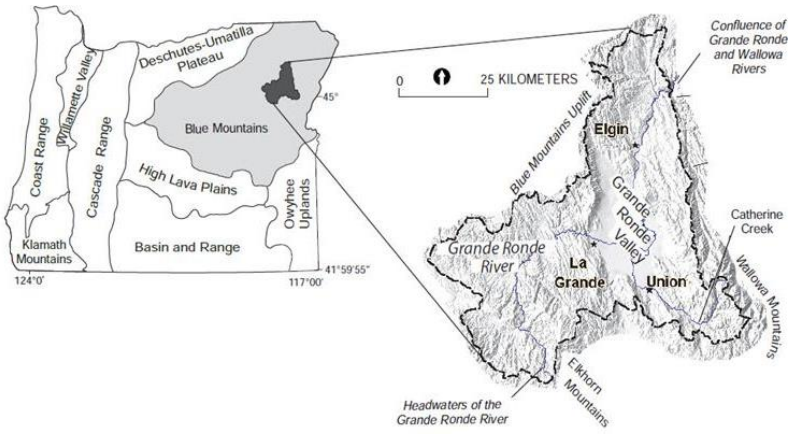
La Grande Ranger District
Wallowa-Whitman National Forest
3502 Highway 30
La Grande, OR
(541) 963-7186

February 15, 2016

Dear Forest User:

The La Grande Ranger District has recently initiated a cooperative agreement with the Bonneville Power Administration, Bureau of Reclamation, and the Confederated Tribes of the Umatilla Indian Reservation to design, analyze and plan fish habitat restoration activities associated with the **Bird Track Springs Fish Habitat Enhancement Project**. The analysis area is approximately 10 air miles west of La Grande, Oregon along approximately 1.9 miles of the Grande Ronde River along State Highway 244. The area consists of 1.2 miles of river on National Forest system lands, 0.1 miles along state lands, and 0.6 miles on privately owned lands along the reach beginning from just upstream of Bird Track Springs Campground downstream to Bear Creek Ranch. The project area is entirely within the Coleman Ridge-Grande Ronde River sub-watershed within the Grande Ronde River-Beaver Creek watershed. The general legal description is Township 3 south, Range 36 east, sections 15 and 16.



This proposal provides stakeholders an opportunity to review and comment prior to completion of the analysis and documentation. Comments received on this proposal will provide a basis for the development and evaluation of additional issues and alternatives. As a project or activity implementing the land management plan not authorized under the Healthy Forest Restoration Act, this project is subject to subparts A and B of the project level pre-decisional administrative review process as described in 36 CFR 218.

Background

The reach of the Grande Ronde River considered for restoration work in this project supports critical summer and winter rearing habitat for spring/summer Chinook salmon, summer steelhead, and native resident fish species. This reach is also utilized by adult fish as a migration and holding corridor as they make their way upstream. In addition to the habitat in the mainstem of the river, this project reach has the potential to be connected to several existing off-channel sloughs and ponds that would provide juvenile Chinook salmon rearing and summer steelhead rearing habitats.

Historically, large trees would have been prevalent within the river and would rack in “jams” that would have rerouted the river around such structures. These jams would have had deep pools

associated with them and would have forced the river onto floodplains more often, alleviating sediment scour of the riverbed. Larger and more dynamic gravel bars would have been prevalent. In late summer, floodplains would have released their water back to the river through cooler groundwater seeps. The river would likely have had multiple channels that were narrower, deeper, and more dynamic than present day. Historically, fish would have spawned in this reach on mobile gravel beds. Today, water is too hot and the gravel too large and compacted for this to occur. Floodplains would have been densely vegetated with a mixture of wetlands, riparian shrubs, and upland trees corresponding to oxbow depressions, historic river swales, and terraces. Today, many of these former swales and depressions exist, but are not active or connected to the river, limiting their availability to provide habitat to native fish.

Existing Condition

Within the upper Grande Ronde River watershed, multiple historic practices have contributed to riparian and instream habitat degradation that has negatively affected spring/summer Chinook salmon, steelhead, and bull trout habitat within the proposed project area. Currently, within the project reach, high water temperatures, low stream flows, simplified habitat, and limited off-channel habitat availability are of greatest concern for these native salmonid populations. These habitat limitations are the result of several historic anthropogenic disturbances that include, but are not limited to, systematic removal of beavers, historic logging practices and use of splash-dams, railroad and road embankment construction, vegetation clearing, and placer mining. Although many of these practices have been reduced or eliminated in recent years, their physical effects persist throughout the project reach.

The existing Bird Track Springs reach of the Grande Ronde River has shallowed and widened into a plane-bed channel with limited heterogeneity and a lower degree of channel-floodplain interaction. Few pools of moderate depth exist. Large wood features that would have played a significant role in channel form are nearly non-existent.

In addition to channel changes, the floodplains within the project reach have been altered, negatively affecting off-channel habitats and floodplain water storage. The most prevalent historic feature within the floodplain includes remnants of the Mount Emily Logging Company railroad grade. The grade has been breached and removed in a few locations, but still acts as a barrier to natural floodplain inundation within the reach.

Previous attempts at restoring this reach include the placement of instream structures including rock weirs, rock barbs, and large wood buried in banks, but those attempts to restore habitat complexity have been largely unsuccessful. This is likely due in part to the scale of previous attempts in light of winter ice issues and a lack of existing large streamside trees within the reach. Freeze-up ice jams have been problematic in this reach. During the winter months, the upper Grande Ronde River is generally shallow and has a relatively low flow along with cold temperatures that favors ice formation. Ice that forms tends to create jams, which then break and raft through the reach. For the most part, these ice processes are naturally occurring, but have

likely been exacerbated by widening and shallowing of the channel. Furthermore, raft ice is currently confined within the channel, resulting in channel bed scour. Ice sorts channel bed materials, removing fine gravels and resulting in channel armoring.

Existing riparian vegetation includes scattered patches of woody shrubs, immature trees, and large areas of herbaceous vegetation where the floodplain had been cleared and drained for ranching. Beavers exist within the reach, but numbers are substantially reduced compared to the historical population, and they no longer play a major role in wood delivery to the channel or maintaining connected off-channel habitats and riparian conditions.

Desired Condition

Restoration of natural processes that create and maintain habitats required for native fish, including salmonids, is the overarching desired condition for the reach. The following desired future conditions (DFCs) for the Bird Track Springs project provide a future vision for the area consistent with the overarching goals of the project and can assist in development of management options for the project. The Interdisciplinary Team (IDT) developed DFCs using Forest Plan goals, objectives, standards, and guidelines. These DFCs focus on major resource areas associated with this project within the project area. The focus of this project will be in meeting the DFC related to water quality and fisheries habitat as follows:

> *Networks of watersheds with good habitat and functionally intact ecosystems contribute to and enhance conservation and recovery of specific threatened or endangered fish species and provide high water quality and quantity. The networks contribute to short-term conservation and long-term recovery at the major population group, core area, or other appropriate population scale. Roads within the watershed do not present substantial risk to aquatic resources.*
>
> *Connectivity exists within watersheds. Lateral, longitudinal, and drainage network connections include floodplains, wetlands, upslope areas, headwater tributaries, and intact habitat refugia. These network connections provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic, riparian-dependent, and many upland species of plants and animals.*
>
> *Habitat elements (including spawning and rearing habitat, substrate, pool habitat, winter habitat, migration corridors, cover, food, habitat complexity, water quality, refugia, productivity, and connectivity) are in a functional condition and are sufficiently distributed to support self-sustaining populations of native resident and anadromous fish. Native fish species have access to historically occupied habitats and connectivity between habitats allows for the interaction of local populations.*

Purpose and Need

The purpose and need for the proposed action is represented by the difference or “gap” between the existing condition within the project area and its desired condition based on Forest Plan management direction and other regional salmon recovery efforts. The purpose and need for the proposed action is to re-establish hydraulic conditions creating a mosaic of diverse habitat types, improving channel-floodplain interactions to increase connectivity to dissipate high-water flows and resolve winter ice issues; and improve riparian vegetation condition and vitality, streambank stability, and nutrient cycling within this reach of the Grande Ronde River. There is also a need to protect existing infrastructure such as campgrounds, roads, and private property, while enhancing

recreational and educational opportunities. Physical process restoration would lead to meeting the desired condition for long-term support of the recovery of salmonids within the Grande Ronde River system.

Proposed Action

To address limited habitat conditions for native fish within the project area, the proposed action would re-establish natural river-floodplain connections and processes. Natural processes within this reach of the Grande Ronde River (GRR) include multiple channel networks usually created through forcing mechanisms of large wood, ice, beaver, and rock.

In order to meet the purpose and need described above, the following types of actions are proposed within the Bird Track Springs project area:

- Improve channel geometry to reduce width-to-depth ratios through large wood placement, channel fill, and bar construction.
- Place large wood structures throughout the mainstem channel to provide habitat and channel control.
- Place floodplain wood and plant native shrubs to reduce overland velocities and trap ice.
- Increase channel/floodplain interactions by removing topographic features that inhibit overland flows (historic railroad grade).
- Increase connectivity of existing channel scars (swales) and enhance fish cover.
- Re-meander channel in appropriate locations to reconnect to floodplains and existing swale networks while improving channel form and function.
- Improve alcove connectivity to mainstem and enhance fish cover.
- Enhance and protect existing functional juvenile fish rearing habitats.
- Improve connectivity of spring-fed side channels, wetlands, and alcoves to provide additional summer and winter rearing habitats.
- Plant native vegetation to improve riparian and floodplain conditions and to shade the stream.
- Reduce risk of erosion to highway embankments through strategic placement of log structure treatments and graded features.

Channel reconstruction would include both instream work (wood placement and fill) and extensive channel construction activities (refer to the attached map for detailed activities and locations). New channel construction would be focused on relocating all or a portion of the river channel to the south floodplain to allow it to re-engage with several historic channel swales and desired pond features. Large wood features (pictured below) would be added throughout the project. Additionally, selective removal of floodplain fill to include the historic Mt. Emily Railroad grade is proposed. Additional side channels and alcove features would be enhanced at historic channel meander scars and depressions throughout the floodplain area that may require additional some additional excavation to meet grade.

Large wood features would be constructed from locally sourced logs from National Forest and/or private lands. Wood structures are a combination of root wads, cut log boles, and slash material. Large wood structures would be embedded in the bed and banks of the channel and floodplain to provide stability and to resist ice forces. Logs would be trucked to the project site and stored in pre-established staging areas and then transported to their project locations by off-road dump truck or helicopter depending on site conditions and environmental concerns. Excavators would be used for large wood construction.


Examples of what large wood structures may look like once installed along this reach of the GRR.

Channel features would be re-graded or constructed to alter the existing width and depth to achieve project goals. Constructed channel features would include pools, riffles, and bars made from gravels and cobble sources from local project excavation. Channel features would be constructed to mimic natural river channel development. Floodplain features to include side channels and alcoves would be re-shaped and wood strategically placed to improve connectivity with the mainstem of the river and to enhance fish cover.

With the exception of logs, native seeds, and potted native plants, all materials utilized for the project would be from within the project site and re-purposed in construction of new channel features and floodplain elements. Existing boulder-rock weirs would be removed and boulders re-purposed as habitat features or structural ballast. Abandoned reaches of the existing channel would be filled utilizing excavated material from constructed channel segments. Existing riparian vegetation, topsoil, shrubs, and trees that require removal would be salvaged and re-used in the floodplain. At this time, it is not expected that any native materials would be removed from the project site. Non-native materials (trash, noxious weeds, etc.) would be removed if found during construction.

All areas disturbed by equipment would be re-vegetated with appropriate native potted plants, salvaged vegetation, and seeded with a native grass/forb seed mix after project completion. Mulch would be used in those areas where woody debris is not available for rehabilitation.

Short-term goals of the proposed action include protecting existing critical rearing and holding habitats within the reach and providing additional and immediate rearing and holding habitats for salmonids. Long-term goals are to re-establish natural processes to move the existing channel from a stagnant condition to a dynamic channel that interacts with its floodplain. Floodplain connectivity provides habitat for multiple species, flood control, and ice storage benefits. Long-term project goals also include providing cooler water within the reach through attenuation of daily heating with a mature and densely vegetated riparian floodplain.

Implementation of this project is expected to take two years to complete. Initial construction is proposed to occur during the summer of 2017 with subsequent phases likely occurring for approximately one to two years thereafter depending upon project design outcomes, stakeholder support, and project funding.

Resource and Management Concerns

Forest Plan direction, Endangered Species Act (ESA), public input and National Policy have led the Forest Service Planning Team to consider the following initial issues and concerns while proposing activities in the Bird Track Springs Fish Habitat Enhancement Project area.

- **Water Quality** – maintain high levels of water quality for the health of the aquatic ecosystem.
- **Fisheries Habitat** – maintain high quality fisheries habitat within the project area for not only resident fish species but also threatened and endangered fish species.
- **Cultural Resources** – there is a potential for historic and pre-historic cultural resources to be located within the project area, which may be impacted by project activities.

Comments

The Bird Track Springs Fish Habitat Enhancement Project Proposed Action is a proposal and not a decision. Comments will be used to identify issues associated with the proposal, assist in resolving issues, and to develop additional alternatives if necessary. Although comments are welcome at any time, they are most helpful to us if received early. I encourage you to return your comments by March 31, 2016. Comments that you provide on this project will become a matter of public record.

Written comment should be addressed to the District Ranger, La Grande Ranger District, 3502 Highway 30, La Grande, OR, 97850; bgamble@fs.fed.us or comments-pacificnorthwest-wallowa-whitman-lagrande@fs.fed.us . If you have any questions, Bill Gamble, District Ranger, can provide additional information at (541) 962-8582.

Thank you for your interest in the Wallowa-Whitman National Forest.

Sincerely,

BILL GAMBLE
District Ranger
La Grande Ranger District